

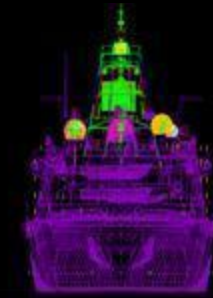
Signatures Department

Ensure a signatures advantage for Navy submarines, surface ships, and small craft through:

- Research and Development
- Testing and Evaluation
- Engineering Applications
- Fleet Support



Science and
Technology



Design and
Requirements



Acquisition and
Construction



Fleet Training
and Simulation



In-Service Testing
and Evaluation

Signatures Department Sites



Signatures Characterization & Analysis Division 71

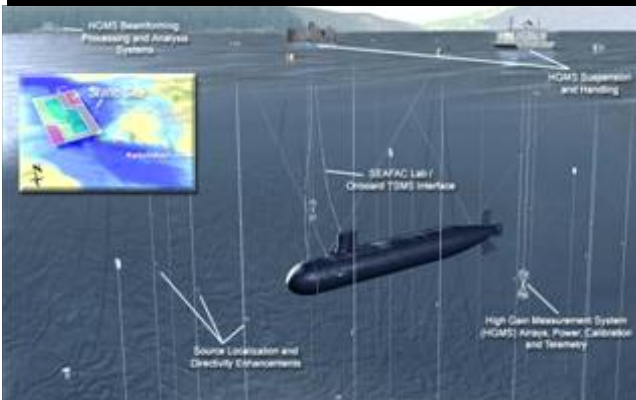
Direct Fleet Interaction ! Help ships stay undetected !

Technical Expertise in:

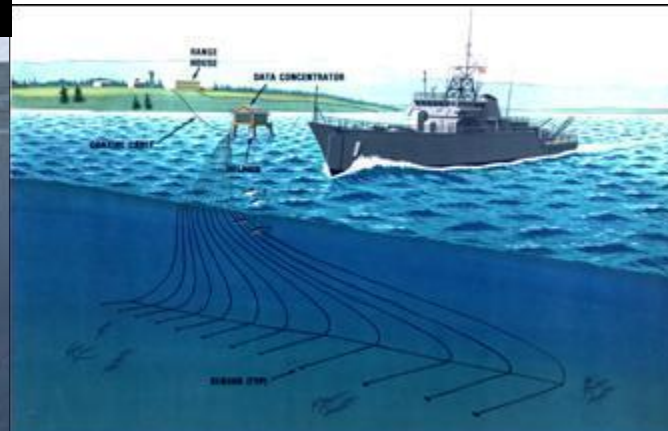
- Underwater Acoustics Measurement & Analysis
- Vibration Transmission Path Analysis
- Machinery Vibration Diagnostics
- Life Cycle Assessment
- Fleet Support



AESD Test Ship at Lake Pend Oreille



Static Ship Acoustic Testing



Mine Warfare Acoustic Ranging



High Resolution Array

Distribution Statement A - Approved for public release; distribution is unlimited.

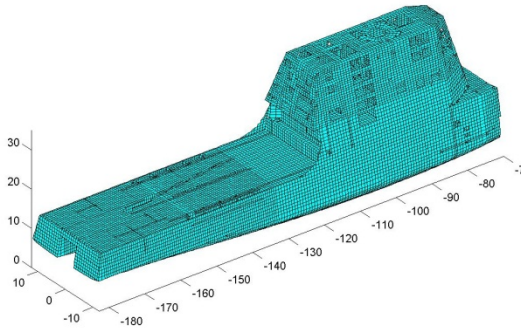
Acoustic Signatures Technology

Division 72

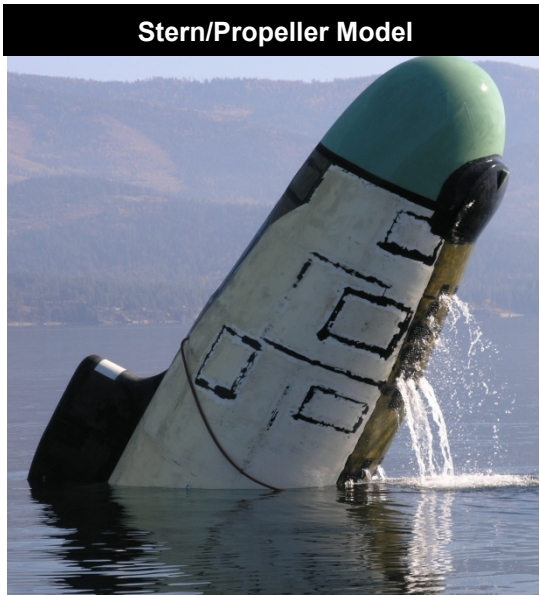
Develop and Deliver Advanced Acoustic Silencing Solutions for the Fleet & Acquisition Communities

Technical Expertise In:

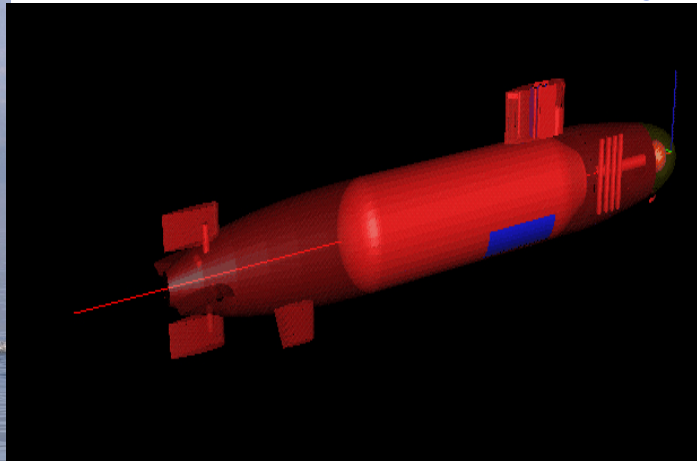
- Hydroacoustics
- Structural Acoustics
- Propulsor Acoustic Design
- Advanced Acoustic Materials
- Acoustic Target Strength
- Shipboard Airborne Noise and Vibration
- Scale Model and Laboratory Acoustic Evaluation



Stern/Propeller Model



Dolly Varden 1:4 Scale Buoyant Vehicle



Target Strength Predictive Model



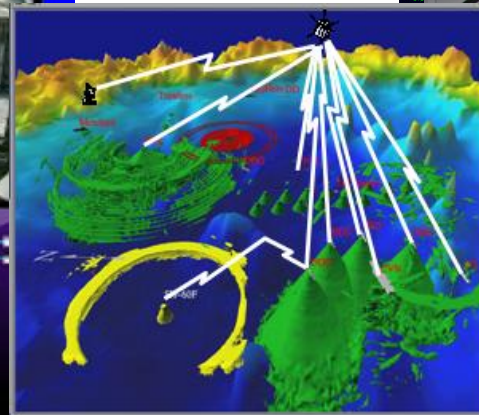
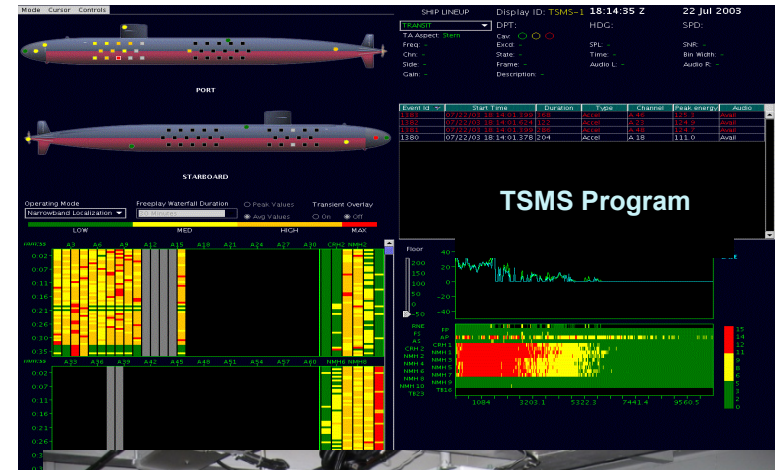
Flow -Noise Studies

Signatures Measurement Technologies & Systems Development Division 73

Develop acoustic measurement systems and more...

Expertise in Acoustic Measurement Technology forms the basis for our systems development capabilities and T&E programs

- Measurement Technology
- Sensor Technology
- Data acquisition Systems
- Advanced Signal Processing
- Synthetic Signature Generation
- Signatures Training and Guidance
- Fleet Support

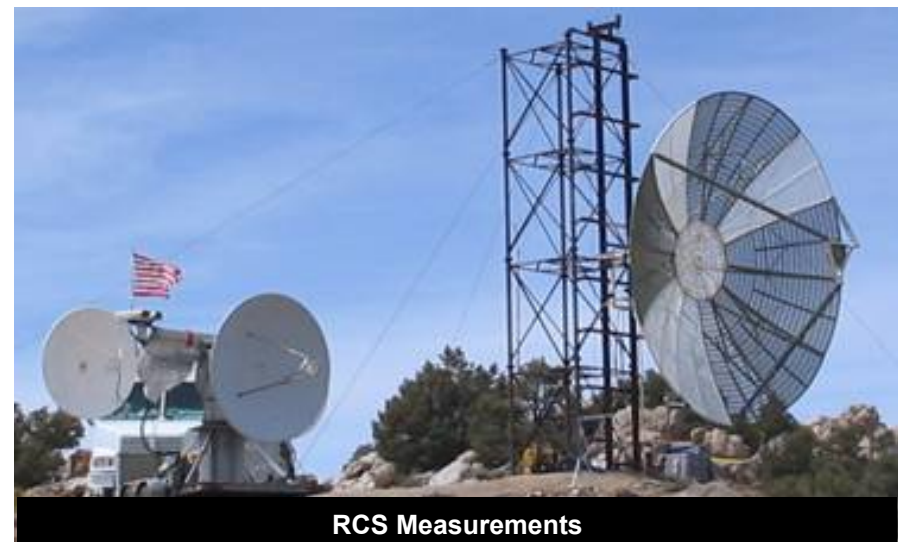


Topside Electromagnetic Signatures Division 74

Bring radar and IR stealth technology to the fleet

Technical Expertise In:

- Research and Development (R&D)
- Modeling & Simulation (M&S)
- Test and Evaluation (T&E)
- Measurement system development
- Fleet Support

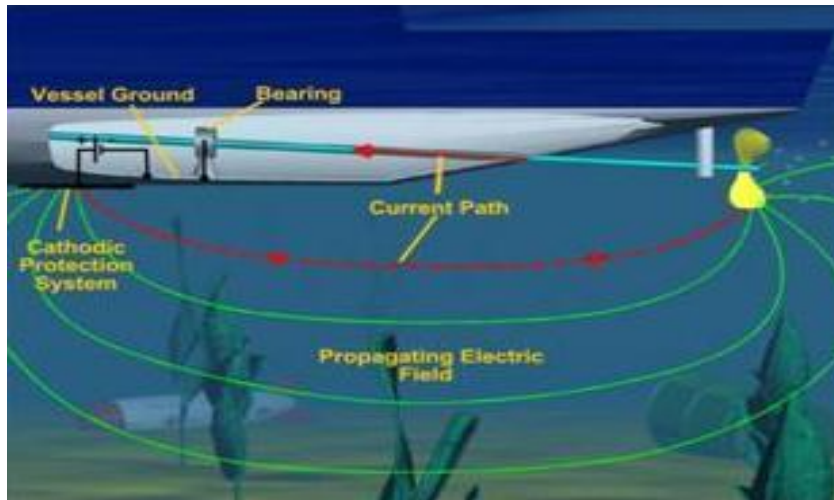


Underwater Electromagnetic Signatures Division 75

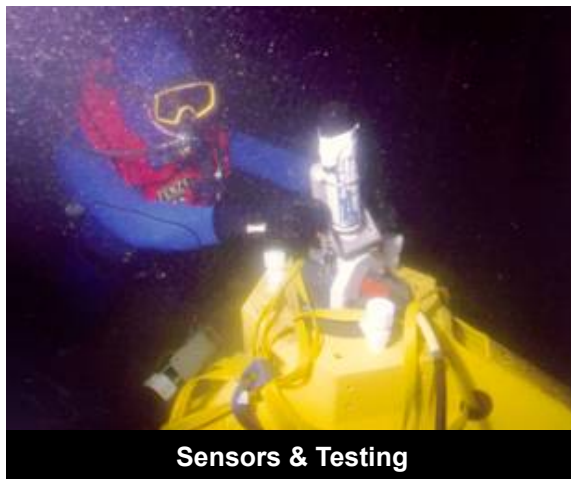
Mines and Ships Don't Mix

Technical Expertise In:

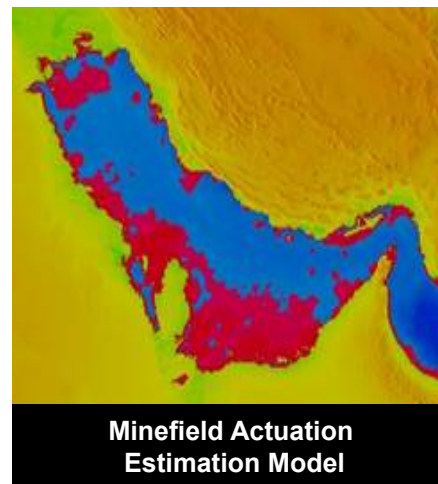
- Fields Modeling/ Measurement
- Silencing systems design
- Advanced modeling & simulation
- Finite element analysis
- Electromagnetic R&D
- Sensor development
- Fleet support



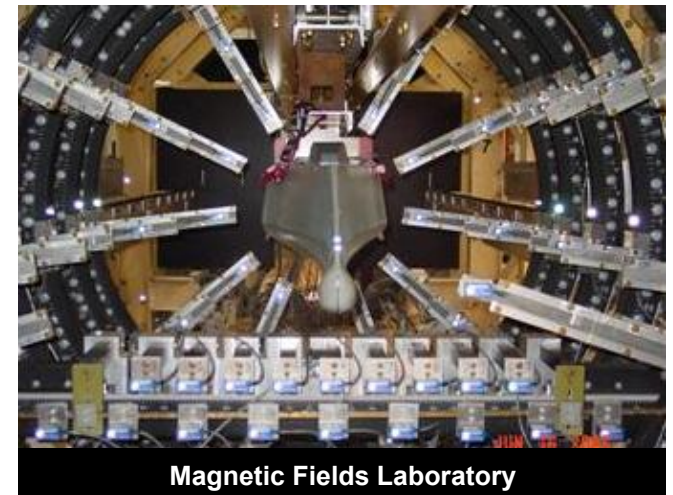
EM Signatures



Sensors & Testing



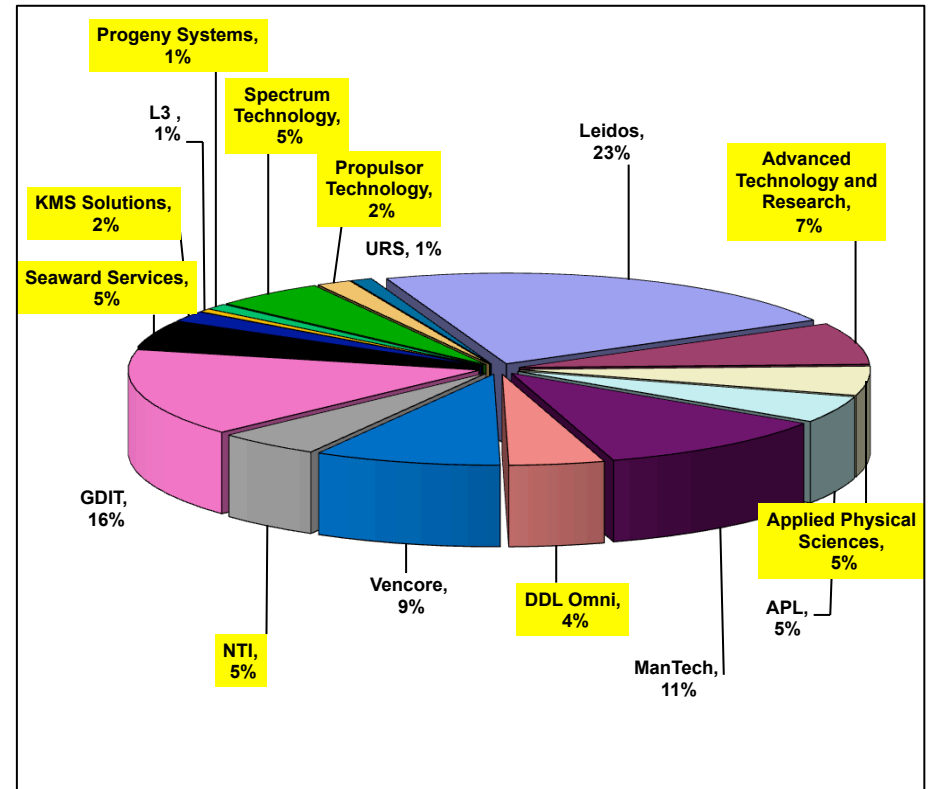
Minefield Actuation
Estimation Model



Magnetic Fields Laboratory

Overview of Active Contracts

Contract Type	Amount
SEAPORT-E	19
IDIQ SERVICES	4
SUPPLY	3



Total Large Division Contractors = 16
10 Contractors are Small Business

Distribution Statement A - Approved for public release; distribution is unlimited.



FY15 Competitive Requirements

Brief Description	Anticipated Announcement Date (QTR/FY)	Incumbent Contractor
IDIQ services to support operations at the Acoustic Research Detachment in Bayview, ID.	2 nd Qtr. – FY15	General Dynamic Information Technology
Engineering services to support Magnetic Silencing Facilities and the Magnetic Fields Laboratory	3 rd Qtr. - FY15	New Requirement
Engineering and technical support services for acoustic recording, shaker vibration, ship control and signature analysis systems.	4 th Qtr. - FY15	DDL OMNI Engineering

Distribution Statement A - Approved for public release; distribution is unlimited.



FY15 Competitive Requirements

Brief Description	Anticipated Announcement Date (QTR/FY)	Incumbent Contractor
Engineering and technical services in support of submarine trials and SEAFAC and STAFAC site operations.	4 th Qtr. - FY15	Leidos
Engineering and technical services in support of the Acoustic Trials Program	4 th Qtr. - FY15	ManTech International
IDIQ services for Bangor Waterfront operations support	4 th Qtr. - FY15	ManTech International

Distribution Statement A - Approved for public release; distribution is unlimited.



FY16 Competitive Requirements

Brief Description	Anticipated Announcement Date (QTR/FY)	Incumbent Contractor
Engineering services for marine signatures, signature measurement systems, and advanced signal processing.	1st Qtr. - FY16	Vencore
Engineering services for ship signature control and signature mitigation.	1st Qtr. - FY16	Applied Physical Sciences

Distribution Statement A - Approved for public release; distribution is unlimited.